



First record of Band-tailed Pigeon, *Patagioenas fasciata* (Columbiformes: Columbidae) in the Sonoran Desert of Baja California

Jonathan G. Escobar-Flores^{1*}, Mariana Delgado-Fernández¹ and Oscar Delgado-González²

1 Centro de Investigaciones Biológicas del Noroeste, Calle IPN 195, La Paz Baja California Sur 23096, Mexico

2 Instituto de Investigaciones Oceanológicas. Universidad Autónoma de Baja California. Km 103 Carretera Tijuana-Ensenada, 3917, Ensenada, Baja California 22860, Mexico

* Corresponding author. E-mail: jescobar@cibnor.mx

Abstract: We report the presence of the Band-tailed Pigeon, which was not previously recorded in the Sonoran Desert in Baja California. The site was 140 km south of the nearest forest. The presence of the pigeon further documents the propensity of Band-tailed Pigeons to wander widely.

Key words: Baja California Peninsula; Cataviña; desert; forest; riparian vegetation

The Band-tailed Pigeon is distributed in pine and coniferous forests from southwestern British Columbia in Canada, the western and southwestern regions of United States, and the Sierra Madre Occidental and Sierra Madre Oriental in Mexico. There are also records of the species in the southern Sierras of Guatemala to the central region of Nicaragua (Davis 1959; Keppie and Braun 2000). This species is resident in the Sierra La Laguna in the southern part of Baja California Peninsula and in the forests of Sierra San Pedro Mártir and Sierra Juarez in the northern part of the peninsula (Wilbur 1987). The records of *Patagioenas fasciata* in the state of Baja California are mostly in the winter season, during which reproductive activity has been observed (Howell 2001). It has not been reported or collected in the Central Desert of the Baja California Peninsula.

The first record of *Patagioenas fasciata monilis* in the arid zones of the state of Baja California was made by photo trapping. We used two cameras with eight megapixels at the locality 16 km north of Cataviña (29°50'59.72" N, 114°49'42.24" W) at an altitude of 650 m.

The photographic record of the Band-tailed Pigeon (Figure 1) was on 26 May 2015 at 05:35 h. The pigeon in the photograph has a thin white band along the neck, yellow beak base, wide gray band on the tail, and with

an iridescent green glow on the neck (Figure 1). All are diagnostic characteristics of the species (Silovsky 1969; Wilbur 1987; Kaufman 2001).

The site is defined by riparian vegetation and Agua Dulce spring. The new record is 140 km south (Figure 2) of the type locality (Concepción, Sierra San Pedro Mártir, state of Baja California (The Museum of Vertebrate Zoology at Berkeley, specimen MVZ-4267).

The Band-tailed Pigeon has a wide distribution in western North America from Colorado and New Mexico west to California and north in pine and oak forests to southwestern British Columbia, Canada. Its diet in these habitats is almost exclusively oak acorns and seeds of pine as well as buds and fruits of other trees (Keppie and Braun 2000). *Patagioenas fasciata* in the Baja California Peninsula is reported in the northern Sierra San Pedro Mártir and Sierra Juarez, with possible breeding sites, and in the Cape Region, including Sierra de la Laguna in the southern part of the peninsula, with sites of confirmed breeding (Howell 2001). The presence of this species in the Central Desert, where forests are not present, is unusual. However, the species is widely noted as a vagrant wanderer and has been recorded in many locations outside of its' normal range (Keppie and Braun 2000: 3–4). It has been documented to seasonally move > 1,200 km south from breeding areas in Colorado to wintering sites in Mexico returning to breeding areas the next spring (Schroeder and Braun 1993).

There are scattered areas in the desert where habitat relicts from the Early Holocene occur. These relicts occur in canyons and creeks with riparian vegetation and abundant shrubs, including Honey Mesquite (*Prosopis glandulosa*) and California Juniper (*Juniperus californica*) in higher elevation of La Alguatosa, 20 km southeast of the site of the new record of the Band-tailed Pigeon (Sankey et al. 2001; Rhode 2002; Minnich 2007).



Figure 1. *Patagioenas fasciata* at the photograph site. Enlargement of pigeon in upper right corner insert. The site is 16 km north of Cataviña, state of Baja California, Mexico.

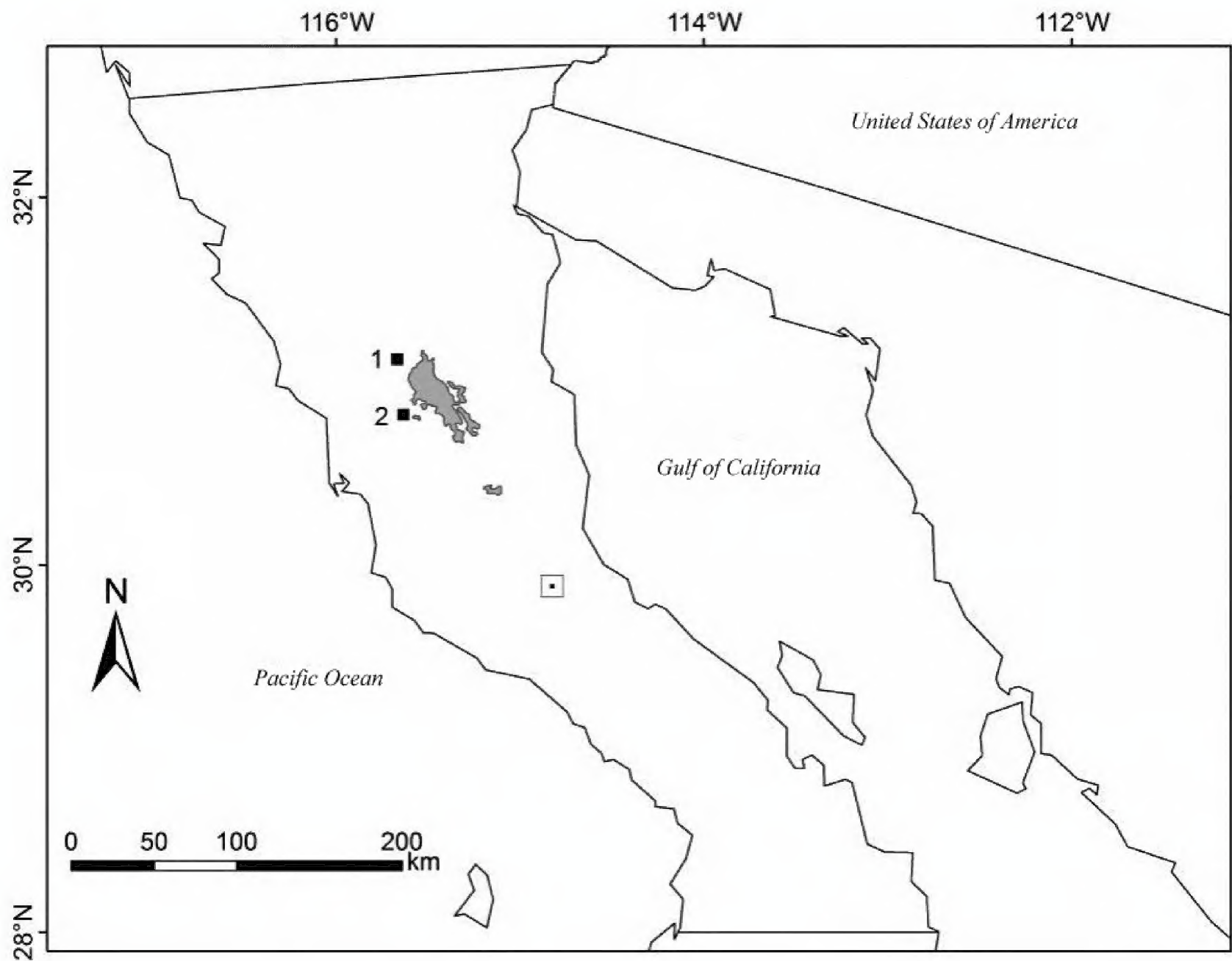


Figure 2. State of Baja California, showing the historic sightings of *Patagioenas fasciata* (black squares labeled 1 (Concepción) and 2 (Arroyo Santo Domingo)). White square with black dot is the new record, which is south of the historic sightings (16 km north of the settlement of Cataviña). The gray areas east of locations 1 and 2 are the coniferous and red oak (*Quercus agrifolia*) forests of the Sierra San Pedro Mártir.

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